

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P214804

Luminaire Tested: **ARCH-AF24-90-D-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214804
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-90-D-U-T3-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7202.6 lumens
Efficiency: N/A
Efficacy: 76.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 94
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

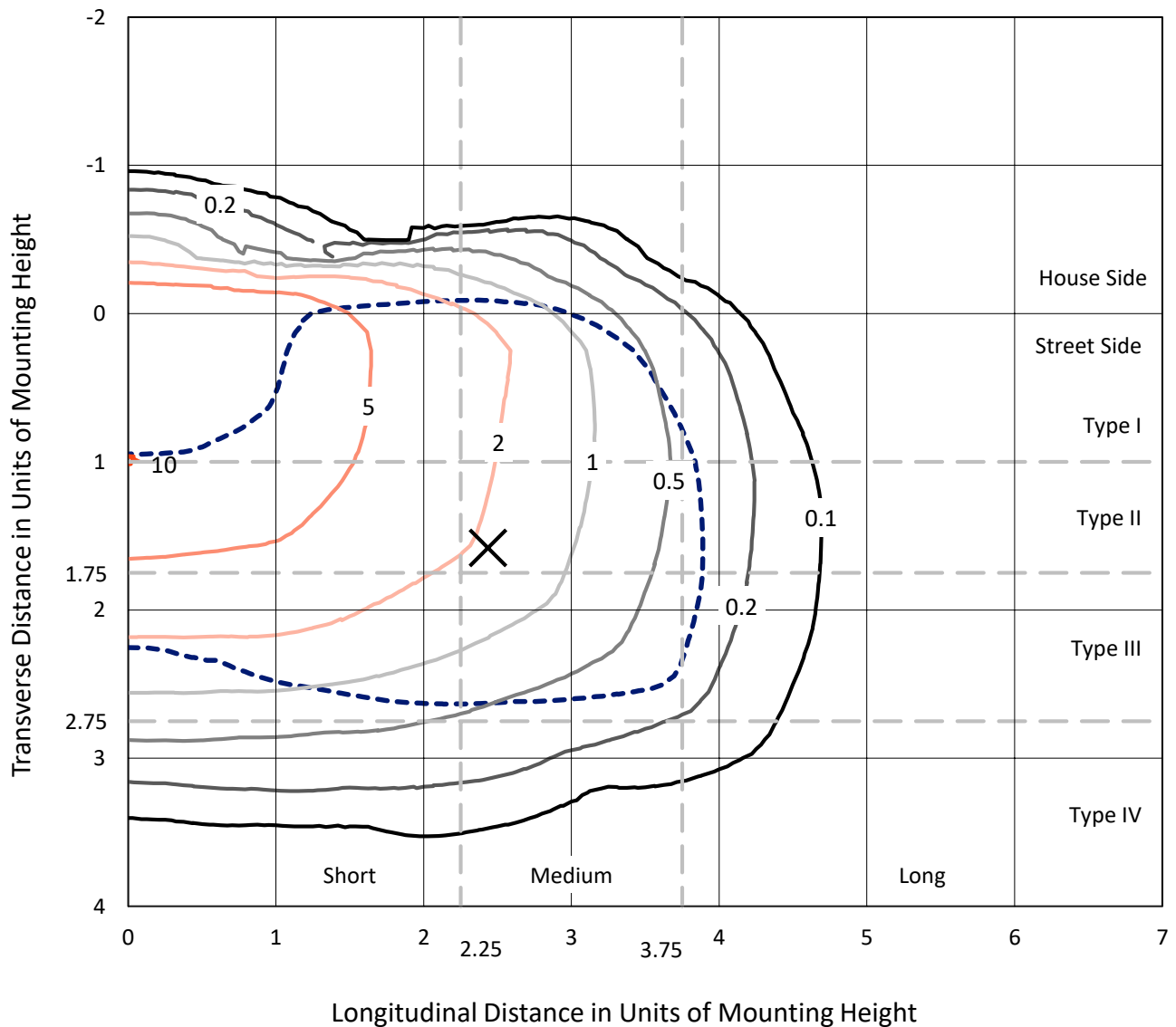


REPORT NUMBER: P214804

CATALOG NUMBER: ARCH-AF24-90-D-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

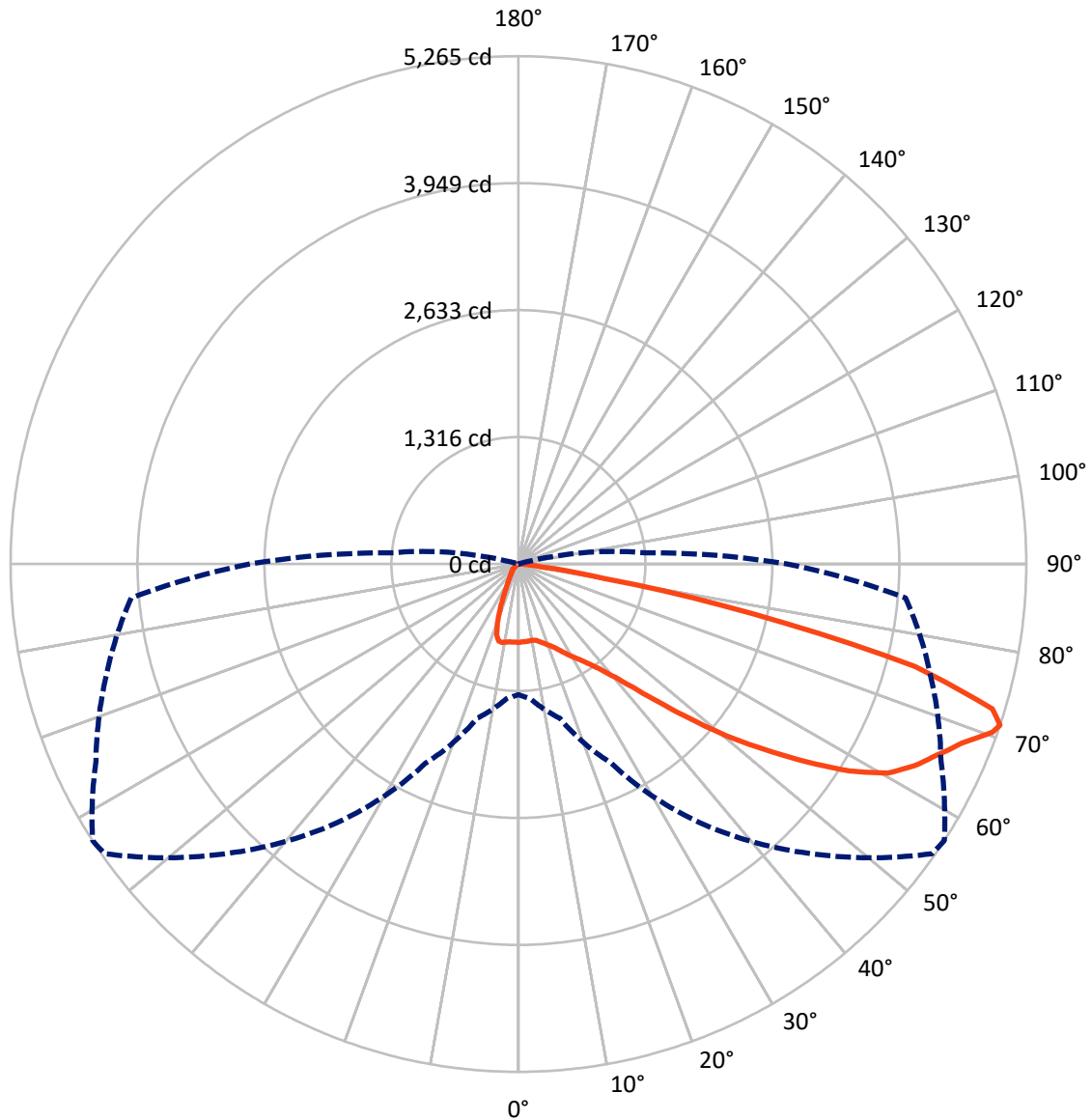


Based on 10 foot mounting height. Maximum calculated value = 10.1 fc
 Type III - Medium - Semi-Cutoff

REPORT NUMBER: P214804

CATALOG NUMBER: ARCH-AF24-90-D-U-T3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical



REPORT NUMBER: P214804

CATALOG NUMBER: ARCH-AF24-90-D-U-T3-HSS

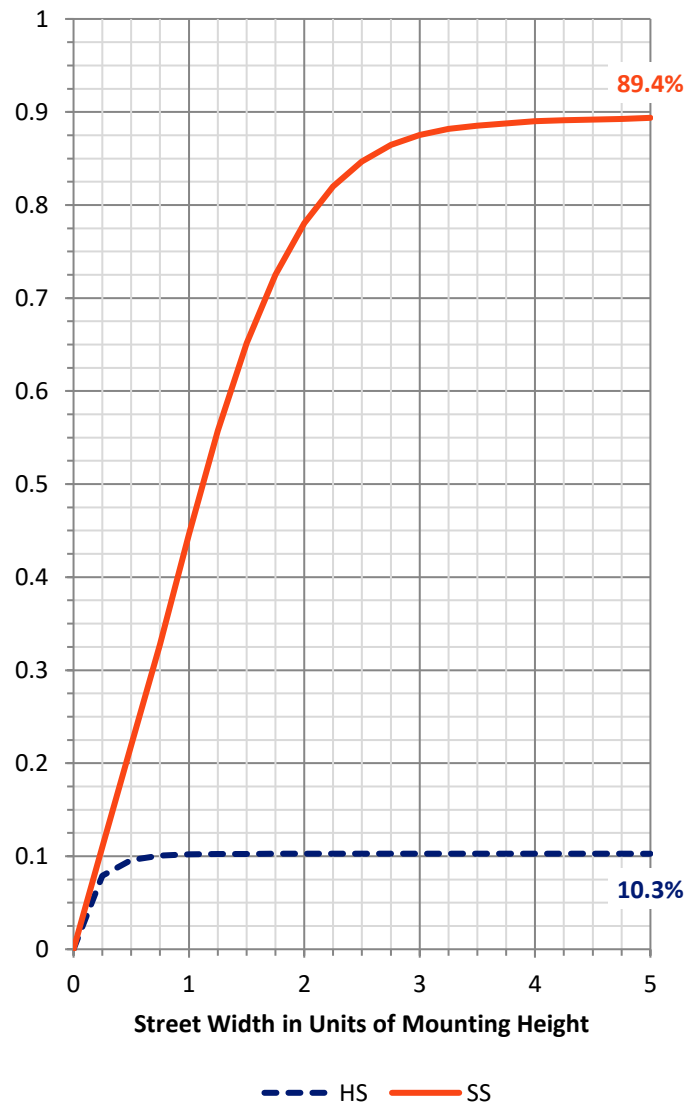
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	746.4	0.0	746.4
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	6456.2	0.0	6456.2
	% Fixture	89.6	0.0	89.6
Total	Lumens	7202.6	0.0	7202.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.4	1.1
10°-20°	204.4	2.8
20°-30°	318.9	4.4
30°-40°	538.9	7.5
40°-50°	1046.7	14.5
50°-60°	1757.8	24.4
60°-70°	2097.7	29.1
70°-80°	1105.5	15.3
80°-90°	56.2	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	7202.6	100.0
0°-180°	7202.6	100.0

Coefficient of Utilization



REPORT NUMBER: P214804

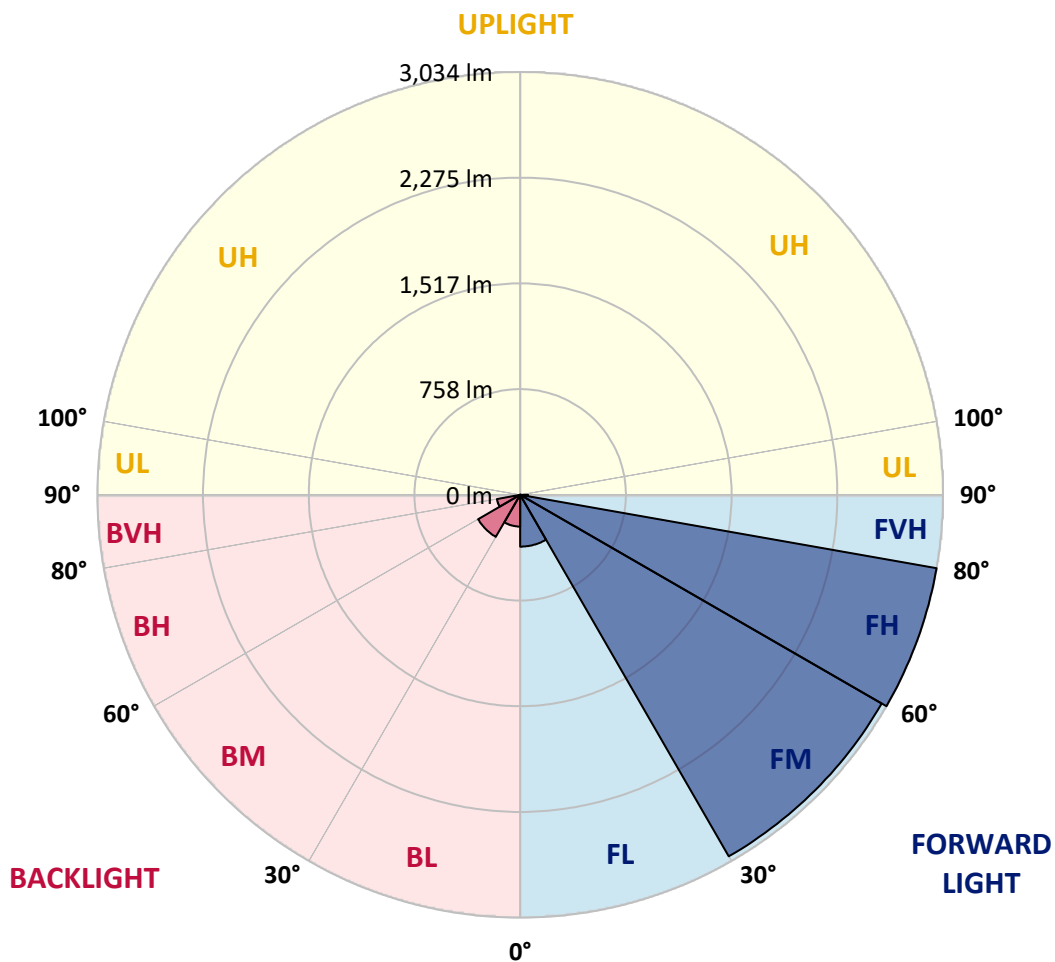
CATALOG NUMBER: ARCH-AF24-90-D-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	371.9	5.2			
FM	(30°-60°)	2994.9	41.6			
FH	(60°-80°)	3033.8	42.1			G2/5000
FVH	(80°-90°)	55.6	0.8			G1/100
BL	(0°-30°)	227.8	3.2	B1/500		
BM	(30°-60°)	348.5	4.8	B1/1000		
BH	(60°-80°)	169.5	2.4	B1/500		G1/500
BVH	(80°-90°)	0.5	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Medium





REPORT NUMBER: P214804

CATALOG NUMBER: ARCH-AF24-90-D-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	814.0	814.0	814.0	814.0	814.0	814.0	814.0	814.0	814.0	814.0	814.0
2.5°	802.3	802.3	802.3	803.9	805.6	805.6	808.9	807.3	807.3	807.3	810.7
5°	780.4	782.1	783.8	787.2	793.9	798.9	807.3	807.3	808.9	812.3	814.0
7.5°	750.2	751.9	757.0	763.6	777.0	788.8	802.3	805.6	810.7	819.1	822.4
10°	731.7	735.1	741.8	750.2	765.4	780.4	797.2	802.3	817.3	832.5	840.9
12.5°	726.7	728.4	735.1	748.6	767.0	785.4	807.3	812.3	834.1	857.6	871.0
15°	735.1	736.8	740.1	755.2	777.0	800.6	829.1	835.9	862.7	889.6	906.3
17.5°	750.2	750.2	753.6	767.0	790.5	817.3	854.3	864.4	894.6	924.7	943.3
20°	760.3	760.3	765.4	778.8	805.6	840.9	884.4	897.9	931.5	965.1	981.8
22.5°	770.4	772.0	777.0	792.2	822.4	871.0	921.4	934.9	973.4	1008.7	1025.5
25°	798.9	797.2	798.9	812.3	847.6	908.0	971.8	988.6	1028.8	1067.4	1075.8
27.5°	877.8	874.4	852.6	844.2	871.0	946.6	1035.5	1052.3	1099.4	1137.9	1137.9
30°	1059.1	1052.3	998.6	929.8	908.0	981.8	1096.0	1119.4	1179.9	1213.4	1203.4
32.5°	1289.0	1273.9	1205.0	1087.6	1000.3	1028.8	1159.7	1186.6	1263.8	1292.3	1270.5
35°	1540.8	1539.0	1453.4	1302.4	1178.2	1126.2	1242.0	1273.9	1371.3	1396.4	1361.1
37.5°	1807.6	1814.3	1757.2	1549.2	1403.1	1285.6	1351.1	1388.0	1507.1	1537.4	1503.8
40°	2104.6	2103.0	2081.2	1834.5	1673.3	1512.2	1508.9	1542.4	1686.7	1733.7	1686.7
42.5°	2480.7	2477.3	2398.4	2176.8	2000.6	1807.6	1738.8	1750.6	1911.7	1988.8	1920.1
45°	2863.2	2839.8	2749.2	2557.8	2401.7	2173.5	2042.5	2042.5	2180.2	2285.9	2178.5
47.5°	3076.4	3052.9	3016.0	2910.3	2863.2	2608.1	2415.2	2391.7	2499.1	2606.5	2455.4
50°	3356.7	3356.7	3264.4	3224.1	3304.6	3125.1	2826.3	2802.9	2854.9	2940.5	2742.4
52.5°	3578.3	3538.0	3472.5	3507.8	3737.7	3655.4	3237.5	3192.2	3232.5	3254.3	2992.5
55°	3670.6	3632.0	3627.0	3756.2	4112.0	3997.8	3658.8	3618.6	3615.2	3507.8	3210.7
57.5°	3689.1	3655.4	3719.2	3945.8	4476.1	4278.1	4078.4	4048.2	3954.2	3685.7	3433.9
60°	3533.0	3549.7	3704.1	4049.9	4691.0	4521.4	4432.5	4400.6	4184.2	3836.7	3682.3
62.5°	3212.4	3252.7	3541.4	4060.0	4612.1	4620.5	4629.0	4607.1	4362.1	3974.4	3932.4
65°	2833.1	2844.8	3192.2	3920.7	4474.5	4590.3	4773.3	4771.6	4498.0	4128.7	4214.4
67.5°	2334.6	2354.7	2655.2	3450.7	4199.2	4576.9	4962.9	4957.8	4652.4	4305.0	4382.2
70°	1737.1	1762.2	2005.6	2683.7	3584.9	4409.0	5211.3	5214.7	4815.2	4439.3	4266.4
71°	1354.4	1399.7	1654.8	2279.2	3271.1	4239.5	5234.7	5265.0	4833.6	4420.8	4028.1
72.5°	664.6	718.3	1038.9	1604.5	2692.1	3860.2	5080.4	5139.1	4717.8	4190.8	3444.0
75°	172.9	182.9	310.5	656.2	1443.4	2557.8	4096.8	4246.3	3856.8	3190.6	2104.6
77.5°	109.0	112.4	146.0	255.1	540.4	971.8	2406.8	2480.7	2203.6	1616.3	741.8
80°	77.2	78.9	92.3	164.5	315.6	283.7	866.0	897.9	797.2	428.0	132.6
82.5°	47.0	47.0	67.1	105.8	194.7	154.4	228.2	243.4	214.8	119.2	43.7
85°	26.9	28.5	41.9	72.2	92.3	75.5	85.6	90.6	92.3	78.9	18.4
87.5°	21.8	23.5	36.9	60.5	50.3	36.9	36.9	38.6	40.3	47.0	8.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P214804

CATALOG NUMBER: ARCH-AF24-90-D-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	814.0	814.0	814.0	814.0	814.0	814.0	814.0	814.0	814.0	814.0	814.0
2.5°	810.7	810.7	812.3	810.7	810.7	810.7	812.3	812.3	812.3	815.7	817.3
5°	814.0	814.0	814.0	812.3	810.7	810.7	814.0	815.7	815.7	820.7	820.7
7.5°	822.4	822.4	819.1	815.7	812.3	807.3	808.9	810.7	808.9	810.7	810.7
10°	840.9	840.9	835.9	829.1	819.1	803.9	783.8	758.6	735.1	726.7	723.3
12.5°	871.0	869.4	859.3	847.6	825.7	773.8	698.2	609.3	535.4	515.3	508.5
15°	904.6	901.3	889.6	869.4	810.7	673.0	515.3	401.1	330.6	313.8	310.5
17.5°	939.9	934.9	918.1	877.8	741.8	500.1	332.4	251.7	213.2	209.8	211.4
20°	976.8	970.1	946.6	861.0	599.1	334.0	214.8	194.7	191.3	191.3	193.0
22.5°	1018.8	1010.4	978.5	800.6	436.4	221.6	184.6	182.9	181.3	179.6	179.6
25°	1067.4	1057.3	1008.7	691.5	300.4	181.3	176.3	171.2	167.9	164.5	162.8
27.5°	1126.2	1112.8	1032.2	557.2	206.4	169.5	166.1	157.7	151.1	144.3	144.3
30°	1184.9	1168.1	1025.5	419.6	167.9	157.7	151.1	141.0	130.9	124.2	122.5
32.5°	1247.0	1230.2	981.8	281.9	152.7	144.3	136.0	120.8	109.0	100.7	99.0
35°	1339.3	1325.9	896.2	186.3	137.6	127.6	115.8	100.7	85.6	77.2	75.5
37.5°	1476.9	1460.2	790.5	142.7	120.8	105.8	95.6	78.9	63.7	55.3	53.7
40°	1661.6	1611.2	664.6	125.9	105.8	87.3	73.9	57.1	45.3	40.3	40.3
42.5°	1876.4	1757.2	528.7	114.2	94.0	72.2	53.7	38.6	31.9	30.2	30.2
45°	2104.6	1893.2	392.7	105.8	82.2	57.1	38.6	26.9	23.5	21.8	21.8
47.5°	2339.6	2004.0	273.5	95.6	68.8	43.7	26.9	20.2	16.8	15.1	15.1
50°	2559.5	2076.1	193.0	85.6	58.7	31.9	20.2	15.1	11.8	11.8	11.8
52.5°	2712.3	2069.4	139.3	73.9	45.3	21.8	13.4	10.0	10.0	10.0	10.0
55°	2846.5	2044.3	109.0	63.7	35.3	15.1	10.0	8.4	8.4	6.8	6.8
57.5°	2960.6	2004.0	92.3	52.1	25.2	11.8	6.8	6.8	5.0	5.0	5.0
60°	3058.0	1953.6	77.2	43.7	16.8	8.4	5.0	3.4	3.4	1.6	3.4
62.5°	3190.6	1921.7	67.1	33.6	11.8	5.0	3.4	1.6	1.6	0.0	0.0
65°	3287.9	1861.3	57.1	23.5	6.8	3.4	1.6	1.6	0.0	0.0	0.0
67.5°	3291.2	1752.2	41.9	13.4	5.0	3.4	1.6	0.0	0.0	0.0	0.0
70°	3026.1	1493.7	26.9	6.8	3.4	1.6	1.6	0.0	0.0	0.0	0.0
71°	2782.7	1322.6	21.8	5.0	3.4	1.6	0.0	0.0	0.0	0.0	0.0
72.5°	2292.6	971.8	16.8	5.0	1.6	1.6	0.0	0.0	0.0	0.0	0.0
75°	1263.8	352.4	8.4	3.4	1.6	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	404.5	107.4	5.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	68.8	16.8	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	23.5	6.8	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.8	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.4	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)